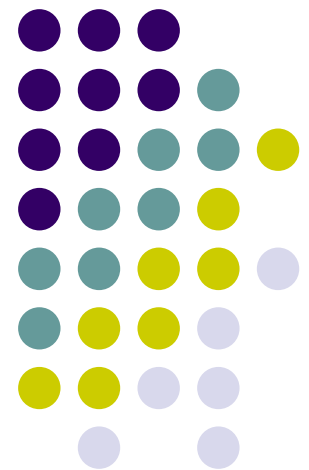
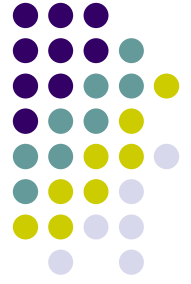


# Assessing Transportation Impacts on Health

**Efforts within King County to  
address health impacts of  
transportation choices**

Bill Lawrence, M.S.P.H.





# Problem Statement

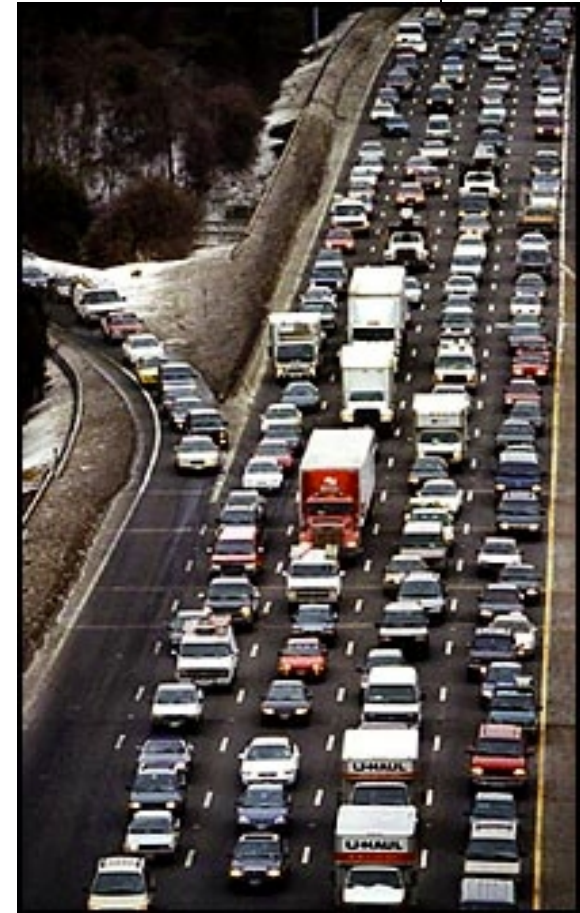
- Challenges in the 21<sup>st</sup> century - environmental health and chronic disease
- Link between environmental health and built environment has long been recognized
- Research is still in infant stage
- Land use choices influence the underlying determinants of community and environmental health
- Public health needs to be partner with land use decision makers



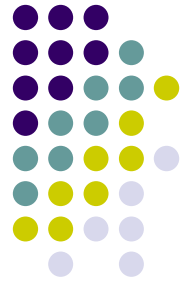
# Connection between Health and the Built Environment



- Connection clearly established
- Increased national attention
- Smart Growth movement gaining interest
- 2005 Public Health initiative
- Cross divisional effort coordinated within Community Assessment Team (EH CAT)
- EH developing pilot Health Impact Assessment process
- Partnerships between PH and planning agencies becoming stronger
- PH SKC establishing itself as a state leader

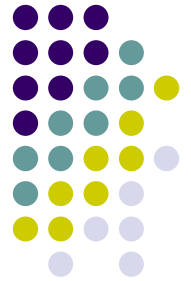


# Adverse Health Effects from the Built Environment



- Indoor air and general air quality issues
- Water quality
- Toxic exposure and body burdens
- Noise
- Accidents/injuries
- Environmental injustice
- Physical inactivity
- Obesity & chronic disease
- Social injustice
- Mental health problems

# Ahwahnee Principles for Resource-Efficient Communities 1991



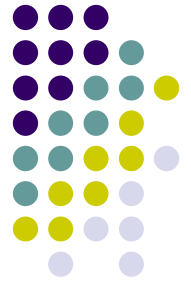
- All planning should be in the form of complete and integrated communities containing housing, shops, work places, schools, parks and civic facilities essential to the daily life of the residents.
- Community size should be designed so that housing, jobs, daily needs and other activities are within easy walking distance of each other.
- As many activities as possible should be located within easy walking distance of transit stops.
- The location and character of the community should be consistent with a larger transit network.

# Land Use Transportation, Air Quality and Health Study (LUTAQH) Findings – 2004



- Initial findings from King County research by Lawrence Frank show a strong connection between the built environment and health
- Low density, disconnected, single use development patterns lead to increased levels of air pollution within King County
- Residents walk more in areas where there are more retail services
- Transit and walking are highly synergistic





## **LUTAQH Findings cont'd**

- **Connected street networks and pedestrian facilities help reduce trips**
- **Walkability results from high density, high street connectivity and mixed use**
- **Individuals in highest walkable neighborhoods are 2.4 times likely to get 30 minutes of exercise a day.**

# Overweight Prevention Forum May 2005 held in Shoreline, WA

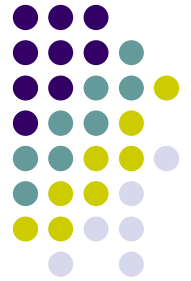


- Large participation by all sectors – transportation, planning, health, non-profits





# **Design for Active Living Workgroups- Spring/Summer 2005**



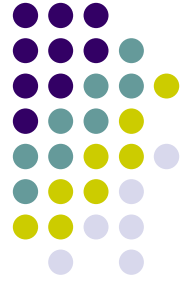
- **Three focus areas: nutrition, physical activity, and the built environment**
- **Non-governmental organizations, city & county planners, public health, and transportation experts participate in the separate workgroups**

# Design for Active Living Workgroups- Spring/Summer 2005



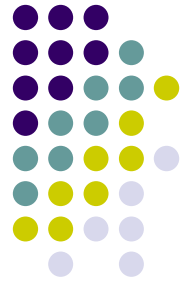
- **Built Environment Workgroup Recs:**
  - Develop checklist of major features of active community design
  - Complete missing pedestrian & bicycle links in King County to ensure a safe & continuous system
  - Site public facilities to support Active Community Design that promotes active transportation and non-motorized connectivity

# Recommendations continued



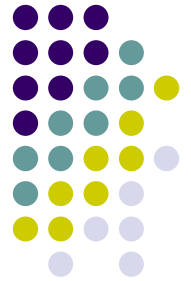
- Increase safety of ped/bike systems in communities
- Increase the number and frequency of Pedestrian Places
- Research information on what components of physical environments work to promote activity and health
- Call for King County Board of Health Resolution on Design for Active Living

# Vision 2020 Puget Sound Regional Council May 2005



- Advocate insertion of health language in region-wide planning policies - what are the obstacles?
- Could 4-E (education, enforcement, encouragement, and equity) approach used in bicycle/pedestrian planning serve as a policy model?
- Support for centers and connecting corridors
- Develop evaluation criteria and monitor progress – health status, air quality, pedestrian injuries.

# Urban Sprawl and it's impact on public health is here now



- Richard Jackson, Howard Frumpkin, Larry Frank, authors of Urban Sprawl and Public Health all presented compelling arguments during Spring 2005 in Seattle.
- “As the perfect storm is approaching within our healthcare system, it is imperative that action be taken. Washington State is poised to do something about this”. Dr. Jackson

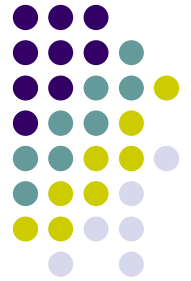
# Public Health – Seattle & King County recent actions



- Active support and interest in this field by all levels of management.
- Overweight Prevention manager and Land Use/ Built Environment manager positions recently recruited and hiring taking place to continue efforts already underway.



# Health Impact Assessment work in King County



- **Burien Town Center project** - new city hall, library, mixed use residential/commercial
- CDC Steps grant awarded to Public Health and Feet First to assess health impact of this five year project.
- Work is on-going and expected to continue into the implementation phase of project

# Continuing HIA Efforts in King County



- Literature review on effect of sprawl upon obesity, pedestrian-auto accidents, and social cohesion.
- Funded by Seattle Biotech Legacy Foundation.
- Northwest Environmental Watch, Transportation Choices Coalition, and Public Health to use research in developing a chapter in Cascadia Scorecard.